+1 (646) 988-0560
samkaddouh@gmail.com

SAM KADOUH

New York, NY
http://samkadouh.com

Data and AI professional with expertise in analytics, data engineering, and applied machine learning. Experienced in building data-driven systems that enable strategic decision-making and business transformation. Proven success in translating technical insights into business impact through automation, predictive analytics, and client-facing delivery. Passionate about helping organizations harness AI responsibly to optimize operations and unlock growth. Holds a 4.0 GPA from Columbia University's M.S. in Applied Analytics program, reflecting strong academic rigor and analytical excellence.

EDUCATION

Columbia University – New York, New York **Sep 2023 – Dec 2024**

Master of Science in Applied Analytics (Incl. STEM OPT extension)

Courses: Frameworks & Methods in Applied Analytics I-II, Applied Analytics in the Organizational Context, Research Design, Storytelling with Data, Strategy & Analytics, Managing Data, Analytics & Leading Change, SQL, Market Research, Python, Capstone Project

Brunel University – London, United Kingdom **Sep 2018 – Jul 2022**

Bachelor of Engineering in Electrical & Computer Engineering with Placement

Courses: Engineering Mathematics & Programming I-II, Applied AI & Machine Learning, AI Systems, Engineering Mechanics, Electronic Devices & Systems, Digital Devices & Systems, Electronic Systems, Signals & Systems, Microcontroller Principiles, Embedded Systems, Advanced Electronics, Research Project

PROFESSIONAL EXPERIENCE

Data Analyst, Cedra Pharmacy – New York, NY **Apr 2025 – Dec 2025**

- Leading the development and automation of data pipelines to consolidate inventory, sales, and customer data, enabling real-time dashboarding and predictive analytics for operational efficiency and strategic decision-making.
- Delivering executive dashboards that influenced procurement and marketing strategy through trend forecasting and data-driven insights.

Backend Data Engineer, *Stealth Startup* – New York, NY **Oct 2024 – Mar 2025**

- Designed and implemented OpenAPI specifications (YAML) for Notion, Dropbox, X, and Github using Swagger UI for documentation and testing.
- Developed scalable backend services with integrated authentication and serverless orchestration to automate data workflows, supporting real-time analytics and decision logic.
- Developed RAG-enhanced API endpoints to better understand user intent and dynamically generate workflow definitions.
- Built CNCF serverless workflows that integrated multiple APIs to automate tasks, such as updating a Slack channel whenever a new Github issue was created.

Business Intelligence Analyst Intern, Credico, – Chicago, IL **Jun 2024 – Aug 2024**

- Designed and automated a reporting pipeline using Qlik Application Automation, generating dynamic 40 page-reports and reducing manual overhead by 4 hours weekly, saving $120,000 annually while ensuring data integrity.
- Enhanced Qlik Sense UX and automated internal reporting via NPrinting, improving analytics accessibility and adoption across teams.
- Conducted in-depth data analysis and collected user insights to optimize UX journeys, improving user satisfaction metrics by 30% across the 40-page report.
- Recommended and implemented custom thumbnail graphics for Qlik Sense client-applications, enhancing user interface aesthetics and improving application navigation efficiency, leading to a 15% increase in user satisfaction.

Data Analyst & NLP Engineer, Brunel University London, – London, United Kingdom ***Jul* 2022 – Feb 2023**

- Developed a full-stack data analytics platform that retrieved Twitter data using Tweepy library, stored it in PostgreSQL, and performed NLP-driven sentiment analysis, frequency mapping and keyword extraction to produce actionable visual insights.
- Designed and deployed interactive visualizations using Python libraries (Matplotlib, WordCloud, Plotly), to communicate trends, public sentiment and topic relevance to non-technical stakeholders in research and academic settings.
- Engineered a robust data pipeline from ingestion to visualization, applying text pre-processing techniques (tokenization, lemmatization, stop-word filtering) and training classification models to identify and label sentiment polarity with high accuracy.

Business Development Assosciate, Money Expert – Surrey, United Kingdom **Oct 2020 – Sep 2021**

- Researched and identified potential partnership and client opportunities .
- Built and maintained automated reporting pipelines, reducing data retrieval time by 25% and enabling real-time performance monitoring for marketing and product teams.
- Partnered with BI and cross-functional stakeholders to define KPIs, translate business requirements into data solutions, and guide product decisions through actionable insights.

PROJECT EXPERIENCE

Skies Shipment Tracking & Client Portal – Personal Project (In Progress) **Feb 2025 – Present**

- Designing and developing a role-based shipment tracking portal for Skies clients, integrating the Searates.com API to deliver real-time shipping and clearance updates via a secure web dashboard.
- Building an access-controlled system with three user tiers — admins (full CRUD access), drivers (update-only), and clients (read-only) — including automated email notifications triggered for required documentation and shipment milestones.

Skies Shipping & Clearing Web Application – Personal Project ***Dec* 2024 – Feb 2025**

- Developed and deployed a full-stack web application for a real-world logistics company (skies-lb.com) that enables users to request shipping quotes, streamlining lead capture and improving client accessibility.
- Built the platform from scratch using TypeScript, React, TailwindCSS, and Node.js, integrating responsive design and automated email handling to support operational efficiency.

Capstone Project, *sponsored by a leading French Financial Institution* – Columbia University **Sep 2024 – Dec 2024**

- Built an AML detection system using K-Means, HDBSCAN, and Graph Network Analysis to identify anomalous transactions based on key typologies like high-risk geographies and rapid fund movement.
- Engineered a scoring framework and explanatory module to flag and rank 53,000+ suspicious transactions, enhancing the sponsor's compliance triage process with actionable insights.

TECHNICAL & ANALYTICAL SKILLS

Languages: Arabic (Native), English (Native), French (Limited Working Proficiency)

Core Competencies: Data Analytics & Visualization, Statistical Modelling, Experiment Design, A/B Testing, Business Intelligence, Data-Driven Decision Making, Growth & Product Development, Quantitative & Qualitative Research, Strategic Insights, Consumer & Market Research, Data Governance & Quality, AI Roadmap Design, Data Strategy

Technical Skills: SQL, Python, R, Tableau, Javascript, Typescript, Power BI, Excel, SPSS, Jupyter, Git, HTML, CSS, Pandas, NumPy, Matplotlib, Seaborn, Plotly, ggplot2, Scikit-learn, TensorFlow, NLTK, React, TailwindCSS, PostgreSQL, MySQL, MongoDB, REST APIs, Vercel, ETL Pipeline Design, Feature Engineering, Unsupervised Learning, Clustering (K-means, HDBSCAN), Graph Network Analysis, Dimensionality Reduction, Dashboard Development, Data Storytelling.